

## Claims

What is claimed is:

1. An apparatus, comprising:  
a data manager;  
a data structure, wherein the data manger utilizes the data structure to maintain information for at least one virtual peripheral component interconnect device (VPCID).
2. The apparatus of claim 1, wherein the information includes both data and state information.
3. The apparatus of claim 1, wherein the data manager utilizes the data structure to maintain information for at least one instance of the at least one VPCID.
4. The apparatus of claim 3, wherein the data structure is comprised of a virtual machine (VM) data structure, wherein the VM data structure is comprised of elements representing a unique VM, wherein each VM data structure element is associated with the at least one VPCID instance.
5. The apparatus of claim 4, wherein each VM data structure element is associated with a configuration hash table, an Input/Output (I/O) hash table and a memory hash table, wherein entries in at least one of the configuration hash table, the I/O hash table and the memory hash table are associated with the at least one VPCID instance.

6. The apparatus of claim 5, wherein the at least one VPCID instance is associated with a data blob.

7. The apparatus of claim 6, wherein the data blob stores state and data information for the at least one VPCID instance.

8. A method, comprising:  
maintaining information for at least one virtual peripheral component interconnect device (VPCID) via a data manager and a data structure.

9. The method of claim 8, wherein the information includes both data and state information.

10. The method of claim 8, further comprising utilizing the data structure by the data manager to maintain information for at least one instance of the at least one VPCID.

11. The method of claim 10, wherein the data structure is comprised of a virtual machine (VM) data structure, wherein the VM data structure is comprised of elements representing a unique VM, wherein each VM data structure element is associated with the at least one VPCID instance.

12. The method of claim 11, further comprising associating each VM data structure element with a configuration hash table, an Input/Output (I/O) hash table and

a memory hash table, wherein entries in at least one of the configuration hash table, the I/O hash table and the memory hash table are associated with the at least one VPCID instance.

13. The method of claim 12, further comprising associating a data blob with the at least one VPCID instance.

14. The method of claim 13, further comprising storing state and data information for the at least one VPCID instance in the data blob.

15. A machine-readable medium containing instructions which, when executed by a processing system, cause the processing system to perform a method, the method comprising:

maintaining information for at least one virtual peripheral component interconnect device (VPCID) via a data manager and a data structure.

16. The machine-readable medium of claim 15, wherein the information includes both data and state information.

17. The machine-readable medium of claim 15, further comprising utilizing the data structure by the data manager to maintain information for at least one instance of the at least one VPCID.

18. The machine-readable medium of claim 17, wherein the data structure is comprised of a virtual machine (VM) data structure, wherein the VM data structure

is comprised of elements representing a unique VM, wherein each VM data structure element is associated with the at least one VPCID instance.

19. The machine-readable medium of claim 18, further comprising associating each VM data structure element with a configuration hash table, an Input/Output (I/O) hash table and a memory hash table, wherein entries in at least one of the configuration hash table, the I/O hash table and the memory hash table are associated with the at least one VPCID instance.

20. The machine-readable medium of claim 19, further comprising associating a data blob with the at least one VPCID instance.

21. The machine-readable medium of claim 20, further comprising storing state and data information for the at least one VPCID instance in the data blob.